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NGUYEN BA, HOANG VU A				
ART UNIT		PAPER NUMBER		
2421				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
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Office Action Summary

Application No.

10/067,460

Applicant(s)

SEDLAK ET AL.

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2421

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 23, 2010 has been entered.
2. Claims 1-14 are pending. Claims 1, 5 and 9 are independent claims.

Response to Arguments

3. Applicants' arguments in the Remarks have been fully considered but they are not moot in view of the new grounds of rejection presented herein.

Claim Rejections – 35 USC § 103

4. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,572,442 to Schulhof et al. ("Schulhof") in view of U.S. Patent No. 5,956,716 to Kenner et al. ("Kenner") and further in view of U.S. Patent Application Publication No. 2002/0087688 by Kamensky et al. ("Kamensky").

It should be noted that hereinafter the use of the clause "see at least" should be interpreted that the cited portions that follow the clause are not the only portions or descriptions of embodiments that are considered to be relevant. Should Applicant find that the cited portions are not relevant, other portions of the disclosure or descriptions of embodiments of the prior art reference will be provided as additional evidence and/or context to the relevancy of the previously cited portions. Since the evidence is from the same reference, the introduction of the

additional evidence in response to Applicant's arguments should not therefore be considered to be that of new grounds of rejection.

Claim 1

Schulhof discloses *a method for transmitting requested content items in a broadband transmission system, said method comprising:*

receiving requests for a plurality of content items on an upstream path of said broadband transmission system (see at least 10:35-41);

creating a list of said content items (see at least 10:35-41).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

creating a request count for each content item of said plurality of content items based on said requests received (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of request count for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

sorting said requests using said request count (Kenner; see at least 5:32-38; 9:55-67; 10:40-57);

content items with a higher request count (Kenner; see at least 9:55-60);

content items with a lower request count (Kenner; see at least 9:61-64).

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items, said content items with a higher request count receiving a higher associated retransmit rate than content items with a lower request count, the retransmit rate*

indicating how often said content items should be retransmitted and repeatedly broadcasting the content items at said associated retransmit rate.

However, in an analogous art, Kamentsky teaches a scalable messaging system for data transmission between set top boxes and a central server wherein the frequency at which availability messages are sent by routers is preferably dependent upon the relatively loading of the individual and that the information in a router availability message can be used in various way to construct a payload message (see Abstract of 2002/0087688 and page 3 of specification of 60/253,442).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify (it is noted that the motivation is not to use verbatim Kamentsky teaching) the instruction code of Kamentsky application program that adjusts the frequency at which availability messages are sent by routers depending upon relatively loading of the individual such that these instruction code are used to direct the central server to adjust the frequency at which to send a content item based upon the request count of the content item (e.g., transmit more frequently an item that has a higher request count) in Schulhof-Kenner because the use of Kamentsky would improve the efficiency of broadcasting content items in Schulhof-Kenner.

Claim 2

The rejection of base claim 1 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *wherein said request count is a number of requests received during a predefined time period for each content item of said plurality of content items* (Schulhof; see at least 10:52 – 11:5).

Claim 3

The rejection of base claim 1 is incorporated. The combination Schulhof- Kenner-Kamentsky further discloses *removing said content item from said list of content items if said*

request count is equal to or less than a predetermined content access count (Schulhof; see at least 11:10 – 41).

Claim 5

Schulhof discloses *a method for optimizing transmit bandwidth utilization in a broadband transmission system employing a content item list, said method comprising:*

receiving requests on an upstream path of said broadband transmission system for transmission of a plurality of content items (see at least 6:24-40; 7:34-53);

adding one content item of said plurality of content items to said content item list if said one content item is not in said content item list (see at least 10:42 – 11:41).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

determining a rate of request for each content item contained in said content item list based on said request received (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

deleting content items from said content list for which the number of requests during a predefined time are less than or equal to a predefined rate of request (Schulhof; see at least 10:42 – 11:41).

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items in said content item list wherein said associated retransmit rate is based on said rate of request, the retransmit rate indicating how often said content items should*

be retransmitted and repeatedly broadcasting the content items at said associated retransmit rate.

However, in an analogous art, Kamentsky teaches a scalable messaging system for data transmission between set top boxes and a central server wherein the frequency at which availability messages are sent by routers is preferably dependent upon the relatively loading of the individual and that the information in a router availability message can be used in various way to construct a payload message (see Abstract of 2002/0087688 and page 3 of specification of 60/253,442).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify (it is noted that the motivation is not to use verbatim Kamentsky teaching) the instruction code of Kamentsky application program that adjusts the frequency at which availability messages are sent by routers depending upon relatively loading of the individual such that these instruction code are used to direct the central server to adjust the frequency at which to send a content item based upon the request count of the content item (e.g., transmit more frequently an item that has a higher request count) in Schulhof-Kenner because the use of Kamentsky would improve the efficiency of broadcasting content items in Schulhof-Kenner.

Claim 6

The rejection of base claim 5 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *wherein said content items with a higher rate of request are transmitted more frequently than content items with a lower rate of request* (Schulhof; see at least 11:16-41).

Claim 7

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner- Kamentsky further discloses *wherein said broadcasting further comprises*

grouping of a plurality of said content items into a transmit package wherein said transmit package is of a predetermined maximum size (Schulhof; see at least 10:66 – 11:5).

Claim 8

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner- Kamentsky further discloses *merging said repeatedly broadcasting content items with other transmitted data* (see discussion regarding repeatedly broadcasting in Claims 1 and/or 5).

Claim 9

Schulhof discloses *a system for optimizing bandwidth utilization in a broadband transmission system, said system comprising:*

a first database containing a plurality of content items (see at least FIG. 1, databases 14, 15, 16, 18);

a second database containing user request information for said content items (see at least FIG. 1, bins in the Information Request Manager software);

a transmit unit (see at least FIG. 1, device 26);

a server computer (see at least FIG. 1, system 10).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

a software that processes said user request information for said content items, determines a rate of request for each content item based on said user request information received (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof

because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner does not specifically disclose *determines an associated retransmit rate for each content item of said plurality of content items in said first database, said associated retransmit rate responsive to said rate of request for each content item, the retransmit rate indicating how often said content items should be retransmitted; and*

repeatedly broadcasts the transmitted content items via the transmit unit to a downstream requesting transceiver display based on the retransmit rate.

However, in an analogous art, Kamentsky teaches a scalable messaging system for data transmission between set top boxes and a central server wherein the frequency at which availability messages are sent by routers is preferably dependent upon the relatively loading of the individual and that the information in a router availability message can be used in various way to construct a payload message (see Abstract of 2002/0087688 and page 3 of specification of 60/253,442).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify (it is noted that the motivation is not to use verbatim Kamentsky teaching) the instruction code of Kamentsky application program that adjusts the frequency at which availability messages are sent by routers depending upon relatively loading of the individual such that these instruction code are used to direct the central server to adjust the frequency at which to send a content item based upon the request count of the content item (e.g., transmit more frequently an item that has a higher request count) in Schulhof-Kenner because the use of Kamentsky would improve the efficiency of broadcasting content items in Schulhof-Kenner.

Claim 10

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *wherein said transmit unit comprises a television transmitter* (Schulhof; see at least FIG.1, device 28).

Claim 11

The rejection of base claim 9 is incorporated. The combination Schulhof-Keller-Kamentsky further discloses *wherein said transmit unit comprises a server computer connected to a network* (Schulhof; see at least FIG. 1, system 10).

Claim 12

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *a third database containing only those of said content items corresponding to said user request information for said content items* (Schulhof; see at least 10:35 – 11:41, e.g., various bins in the Information Request Manager).

Claim 13

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *wherein said associated retransmit is further responsive to available bandwidth for content item broadcast* (Schulhof; see at least 11:10-41).

Claim 14

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Kamentsky further discloses *wherein said associated retransmit rate of transmission is further responsive to a duration of each content item of said plurality of content items in said first database* (Schulhof; see at least 11:10-41).

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The prior art of record, taken individually or in combination, fails to teach or suggest the following features recited in dependent claim 4 when these features are considered in the context of the independent claims 1, 5 and 9:

grouping content items with a request count greater than or equal to a second predetermined access count into a transmit group;

determining a group retransmit rate for said transmit group; and

repeatedly broadcasting the transmit group at said retransmit rate.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:30 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2400 Group receptionist (571) 272-2400.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Hoang-Vu Antony Nguyen-Ba/

Primary Examiner, Art Unit 2421

April 9, 2010